Analysis Factors Affecting the Low Coverage of Tetanus Toxoid Immunization in Pregnant Women at Hutabaginda Health Center Tarutung District Tapanuli Utara District In 2022

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Abstract

Tetanus is a life-threatening bacterial infection due to wound contamination with Clostridium tetani and is characterized by muscle spasms and dysfunction of the autonomic nervous system. The study aimed to analyze the factors that influence the low coverage of tetanus toxoid immunization in pregnant women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency, in 2022. Quantitative research method with a cross-sectional approach. The research was conducted in the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency, from November 2022 to March 2023. The study population consisted of 150 pregnant women. The sampling technique used was the probability sampling technique. In probability sampling, the number of samples is 109 pregnant women. The bivariate test uses the Chi-Square Test, and the multivariate test uses the Linear Regression Test. The results showed that there was a relationship between the age of pregnant women and the low coverage of Tetanus Toxoid immunization (p-value = 0.002), there was a relationship between the education of pregnant women and the low coverage of Tetanus Toxoid immunization (p-value = 0.003), there was a relationship between the parity of pregnant women and the low coverage of Tetanus Toxoid immunization (p-value = 0.007), there was a relationship between the knowledge of pregnant women and the low coverage of Tetanus Toxoid immunization (p-value = 0.002), there was a relationship between the attitude of pregnant women and the low coverage of Tetanus Toxoid immunization. tetanus toxoid (p-value = 0.006), and there is a relationship between family support of pregnant women and low coverage of tetanus toxoid immunization (p-value = 0.006) at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022. The most dominant factor for pregnant women not to be immunized against tetanus toxoid is the knowledge factor, with a significant value of 0.02 <0.05. Recommendations for pregnant women to take advantage of health facilities to get pregnancy health services by participating in tetanus toxoid immunization.

Keywords:* *Coverage, Immunization, Pregnant Women, Tetanus Toxoid

INTRODUCTION

Tetanus is a life-threatening bacterial infection caused by contamination of a wound with Clostridium tetani and is characterized by muscle spasms and dysfunction of the autonomic nervous system (Trung et al., 2019). Tetanus is caused by wound invasion of the anaerobic bacterium Clostridium tetani and the subsequent spread of a very potent neurotoxin produced during bacterial growth (WHO, 2018). WHO global statistics from 2019 estimate that millions of births are not assisted by trained health staff, which may be a significant reason for the increase in maternal mortality (WHO, 2019). Therefore, increasing women's access to quality care before, during and after childbirth is very important.

In 2019 WHO estimated that 30.848 newborns died from neonatal tetanus, an 85% reduction from the situation in 2000. Most of these deaths occur in developing countries,

especially in rural communities where deliveries and abortions are performed under poor hygienic conditions (WHO, 2019). Based on the causes, most maternal deaths in 2021 were related to COVID-19 with 2.982 cases, bleeding with 1.330 cases, and hypertension in pregnancy with 1.077 cases (Kemenkes RI, 2021).

Several factors cause the low coverage of Tetanus Toxoid immunization in cats. Seven factors also influence education, work, age, interests, experience, surrounding culture, and information. Knowledge can influence attitudes and individual practices in maintaining or improving health (Esem et al., 2020). Research (Anatea et al., 2018) stated that good knowledge from education, media exposure, and follow-up services for Antenatal Care were significant predictors of the utilization of Tetanus Toxoid immunization.

Based on the initial survey conducted by the researchers at the research location, many pregnant women had not received and had not been immunized against tetanus toxoid. From the data at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022 obtained until December 2022, the achievements of the Tetanus Toxoid immunization program for pregnant women out of 630 targeted pregnant women, only 61 (9.68%) people carried out Tetanus Toxoid immunization, Tetanus Toxoid Immunization pregnant women out of 630 targeted people, only 41 people (6.5%) carried out Tetanus Toxoid immunization, Tetanus Toxoid immunization for pregnant women out of 630 targeted people, only 19 people (3.01%) who carried out Tetanus Toxoid immunization. Tetanus Toxoid immunization for pregnant women out of 630 targeted people, only 6 people (0.95%) got Tetanus Toxoid immunization, Tetanus Toxoid Immunization for pregnant women out of 630 targeted people, only 18 people (2.85%) got Tetanus immunization Toxoids.

Factors that cause pregnant women to carry out tetanus toxoid immunization or are not influenced by external or internal factors, therefore the researchers added the factors of age, last education, parity, knowledge, attitudes, and family support as factors that have the potential to influence pregnant women to carry out Tetanus Toxoid immunization or not to carry out immunization.

From the data above, researchers are interested in knowing more about the reasons why pregnant women do not carry out tetanus toxoid immunization, so researchers take the title Factors Affecting Low Coverage of Tetanus Toxoid Immunization in Pregnant Women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2023.

METHODS

This research is a quantitative study with a cross-sectional design. This research was carried out in the working area of the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency, from November 2022 to March 2023.

The population in the study were 150 pregnant women in the Hutabaginda Community Health Center, Tarutung District, North Tapanuli Regency. The sampling technique in this study used a probability sampling technique. The sample size obtained was 109 pregnant women in the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency.

The variables of this study are age, education, parity, knowledge, attitudes and family support. Bivariate analysis using Chi-Square Test, multivariate analysis using Linear Regression Test.

RESULTS

Demographic Characteristics of Pregnant Women Respondents at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

Table 1. Table of Frequency Distribution of the Characteristics of Respondents of Pregnant Women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

Variable	n	%
Age		
17-25 years (Late Youth)	29	26,6
26-35 years (Early Adult)	51	46,8
36-45 years (Late Adult)	27	24,8
46-55 years (Early Elderly)	2	1,8
Education		
Elementary school	7	6,5
Junior high school	12	11
Senior High School	39	35,8
College	51	46,7
Parity		
Primiparas (<2 children)	21	19,3
Multipara (> 2 children)	88	80,7
Knowledge		
Good	22	20,2
Enough	35	32,1
Not enough	52	47,7
Attitude		
Good	45	41,3
Enough	21	19,3
Not enough	43	39,4
Family support		
Good	39	35,8
Enough	47	43,1
Not enough	23	21,1
Total	**109**	**100**

Characteristics of respondents based on age in this study show that the majority of pregnant women aged 26-35 years (early adults), as many as 51 people (46.8%), followed by pregnant women aged 17-25 years (final teenagers) as many as 29 people (26.6%), pregnant women aged 36-45 years (final adults) as many as 27 people (24.8%) and pregnant women aged 46-55 years (early elderly) as many as 2 people (1.8%).

The characteristics of pregnant women respondents based on their last education showed that the majority of pregnant women had higher education, 51 people (46.7%), followed by 39 people with high school education (35.8%), 12 people with junior high school education (11.0%) and 7 elementary school graduates with 7 people (6.5%).

Characteristics of pregnant women based on parity, namely the majority of pregnant women with multipara parity (>2 children) as many as 88 people (80.7%) followed by primapara parity (<2 children) as many as 21 people (19.3%).

Characteristics of pregnant women based on knowledge showed that the majority of pregnant women had less knowledge about tetanus toxoid immunization, as many as 52 people (47.7%), followed by sufficient knowledge of 35 people (32.1%) and good knowledge of 22 people (20.2%).

Characteristics of pregnant women based on attitude showed that the majority of pregnant women had a good attitude in tetanus immunization as many as 45 people (41.3%), followed by a less attitude as many as 43 people (39.4%), and a fairly good attitude as many as 21 people (19.3%).

Characteristics of pregnant women based on family support showed that the majority of pregnant women had quite good family support in tetanus immunization, as many as 47 people (43.1%), followed by good family support as many as 39 people (35.8%), and low-income family support as many as 23 people (21.1%).

Table 2. Relationship between Age and Low Coverage of Tetanus Toxoid Immunization in Pregnant Women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

Variable	Pregnant Women				Total		Sig.
	Tetanus Toxoid Immunization		No Tetanus Toxoid Immunization				
	n	%	n	%	n	%	
Age							
17-25	7	6,4	22	20,2	29	26,6	
26-35	11	10,2	40	36,7	51	46,9	
36-45	7	6,4	20	18,3	27	24,7	**0,003**
46-55	0	0	2	1,8	2	1,8	
Total	**25**	**23**	**84**	**77**	**109**	**100**	

The results showed that the majority of pregnant women who did not participate in tetanus toxoid immunization were assessed from the age of 26-35 years (early adulthood), as many as 40 pregnant women (36.7%) with a sig value of 0.03 <0.05.

Table 3. The Relationship between Education and the Low Coverage of Tetanus Toxoid Immunization in Pregnant Women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

Variable	Pregnant Women				Total		Sig.
	Tetanus Toxoid Immunization		No Tetanus Toxoid Immunization				
	n	%	n	%	n	%	
Education							
Elementary school	1	0,9	6	5,6	7	6,5	
Junior high school	4	3,7	8	7,3	12	11,0	
Senior High School	7	6,4	32	29,4	39	35,8	**0,007**
College	19	17,3	32	29,4	51	46,7	
Total	**31**	**28,4**	**78**	**71,6**	**109**	**100**	

The results showed that the majority of pregnant women who did not participate in tetanus toxoid immunization were judged by their last education at tertiary and high school, respectively as many as 32 pregnant women (29.4%), with a sig value of 0.07> 0.05.

Table 4. The Relationship between Parity and the Low Coverage of Tetanus Toxoid Immunization in Pregnant Women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

Variable	Pregnant Women				Total		Sig.
	Tetanus Toxoid Immunization		No Tetanus Toxoid Immunization				
	n	%	n	%	n	%	
Parity							
Primiparas (<2 children)	12	11,0	9	8,3	21	19,3	
Multipara (> 2 children)	29	26,6	59	54,1	88	80,7	**0,003**
Total	**88**	**37,6**	**92**	**62,4**	**109**	**100**	

The results showed that the majority of pregnant women who did not participate in tetanus toxoid immunization were assessed by parity, namely multiparas (> 2 children) as many as 59 pregnant women (54.1%), with a sig value of 0.03 <0.05.

Table 5. The Relationship between Knowledge and Low Coverage of Tetanus Toxoid Immunization in Pregnant Women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

Variable	Pregnant Women				Total		Sig.
	Tetanus Toxoid Immunization		No Tetanus Toxoid Immunization				
	n	%	n	%	n	%	
Knowledge							
Good	10	9,2	12	11,0	22	20,2	
Enough	17	15,6	18	16,5	35	32,1	**0,002**
Not enough	10	9,2	42	38,5	52	47,7	
Total	**37**	**34**	**72**	**66**	**109**	**100**	

Based on Table 4.5, the results showed that most pregnant women who did not participate in tetanus toxoid immunization had less knowledge, as many as 42 pregnant women (38.5%), with a sig value of 0.02 <0.05.

Table 6. Table of Attitudes Affecting the Low Coverage of Tetanus Toxoid Immunization in Pregnant Women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

Variable	Pregnant Women				Total		Sig.
	Tetanus Toxoid Immunization		No Tetanus Toxoid Immunization				
	n	%	n	%	n	%	
Attitude							
Good	18	16,5	27	24,8	45	41,3	
Enough	9	8,3	12	11,0	21	19,3	**0,006**
Not enough	19	17,4	24	22,0	43	39,4	
Total	**46**	**42,2**	**63**	**57,8**	**109**	**100**	

The results showed that most pregnant women who did not participate in tetanus toxoid immunization had a good attitude, as many as 27 pregnant women (24.8%), with a sig value of 0.06> 0.05.

Table 7. Relationship between family support and low coverage of tetanus toxoid immunization in pregnant women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

Variable	Pregnant Women				Total		Sig.
	Tetanus Toxoid Immunization		No Tetanus Toxoid Immunization				
	n	%	n	%	n	%	
Family support							
Good	16	14,7	23	21,1	39	35,8	
Enough	20	18,3	27	24,8	47	43,1	**0,003**
Not enough	9	8,3	14	12,8	23	21,1	
Total	**45**	**41,3**	**64**	**58,7**	**109**	**100**	

The results showed that the majority of pregnant women who did not participate in tetanus toxoid immunization due to lack of family support were 27 (24.8%), with a sig value of 0.03 <0.05.

Table 8. Dominant Factors for Pregnant Women with Low Coverage of Tetanus Toxoid Immunization

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.542	2.340		6.951	.02
	Age	-.189	.152	-.171	-2.399	.03
	Last education	-.440	.117	-.140	-1.514	.07
	Parity	-.245	.127	-.190	-2.082	.03
	Knowledge	-.175	.129	-.044	-1.484	.02
	Attitude	-. 212	.119	-.124	-1.232	.06
	Family support	-.187	.179	-.144	-1.945	.03

* *Multivariate Linear Regression Test*
a. Dependent Variable: Pregnant Women Not Immunized with Tetanus Toxoid

The table above describes the most dominant factor for pregnant women who are not immunized against tetanus toxoid: the knowledge factor with a significant value of 0.02 <0.05.

DISCUSSION

Age factor that affects the low coverage of tetanus toxoid immunization in pregnant women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

Based on the results of research conducted by researchers, the results obtained on the age factor were seen from the characteristics that the majority of pregnant women aged 26-35 years (Early Adults) were 51 people (46.8%), followed by pregnant women aged 17-25 Years (Late Adolescents) of 29 people (26.6%), pregnant women aged 36-45 years (Late Adult) of 27 people (24.8%) and pregnant women aged 46-55 Years (Elderly Early) of 2 people (1.8%). The results of data processing with the chi-square test showed that the majority of pregnant women who did not participate in tetanus toxoid immunization were assessed from the age of 26-35 years (early adulthood), as many as 40 pregnant women (36.7%) with a significant value of 0.03 <0.05.

Age is a variable that is always considered in epidemiological investigations. The morbidity and mortality rates in almost appropriate conditions show a relationship with age. Age is one factor influencing a person's behaviour in making decisions. Age shows a person's maturity level in logical thinking (Notoatmodjo, 2014).

Age ≥20 years, including the productive age, where a person reaches a level of maturity in terms of productivity in the form of rational and motor. Mothers of productive age are mothers in the productive age group, where a person is required to prepare and manage all their

needs, especially in maintaining the health of themselves and the baby they contain, such as participating in Tetanus Toxoid immunization when pregnant women (Dian et al., 2019).

In line with the results of the study Fauziah et al., (2021) with the theory of experiencing pregnancy and its various risks, it is still a new thing so that mothers are easily exposed to wrong information about pregnancy. At a very young age, mothers generally cannot make their own decisions and are very dependent on the decisions of those around them, such as husbands and close relatives. Therefore, primiparous pregnant women in their late teens are very vulnerable not to carry out Tetanus Toxoid immunization if they do not get support from their husbands (Etnis, 2020).

Research Alexander et al., (2020) showed that 20 (83.3%) respondents aged 20-35 years carried out Tetanus Toxoid immunization, while 5 (35.7%) respondents aged < 20 years -> 35 years. The results of the chi-square statistical test with a value of p = 0.009, α = 0.05 p <α. These results indicate that age influences pregnant women in carrying out tetanus toxoid immunization. From the results of the analysis, the OR value (Odd Ratio) = 9,000 with a lower value = 1,945 and an upper value = 41,654 means that pregnant women aged <20 years -<35 years have a risk of 9 times not doing Tetanus Toxoid immunization compared to pregnant women aged 20-35.

Educational Factors Affecting the Low Coverage of Tetanus Toxoid Immunization in Pregnant Women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

Based on the results of research conducted by researchers, the results on the educational factor were seen from the characteristics that the majority of pregnant women had the last education from tertiary education as many as 51 people (46.7%), followed by the last education from high school as many as 39 people (35.8%), the last education was junior high school as many as 12 people (11.0%), and the last education was elementary school as many as 7 people (6.5%). The results of data processing with the chi-square test showed that the majority of pregnant women who did not participate in tetanus toxoid immunization were judged by their last education at tertiary and high school, respectively, as many as 32 pregnant women (29.4%) with a significant value of 0.07> 0.05.

The results of this study are by Green and Kreuter's health behaviour theory (2010) which suggests that education is a predisposing factor of health behaviour and health-seeking behaviour. The higher the mother's education, the better her health behaviour, including behavior in carrying out tetanus toxoid immunization. The higher the mother's education level, the better the mother's health-seeking behaviour. In this case, the mother will seek information

related to antenatal care from health workers who improve the mother's behaviour in carrying out Tetanus Toxoid immunization (Notoatmodjo, 2012).

Education affects the learning process. The higher a person's education, the easier it is to receive information. However, it should be emphasized that someone with low education does not mean that they have low knowledge. The environment is everything around the individual, both the physical, biological and social environment that influences the process of entering knowledge into the individual (Notoadmodjo, 2012).

Research results from Alexander et al., (2020) showed that Respondents who carried out Tetanus Toxoid immunization with higher education 18 (81.8%) respondents, while respondents who carried out Tetanus Toxoid immunization with low education 7 (43.8%) respondents. The results of the chi-square statistical test with a value of $p = 0.036$, $\alpha = 0.05$ $p < \alpha$. These results indicate that educational factors influence pregnant women in carrying out tetanus toxoid immunization. From the results of the analysis, the OR (Odd Ratio) = 5,786 with a lower value = 1,336 and an upper value = 25,065 means that pregnant women with low education have a risk of 5 times not doing Tetanus Toxoid immunization compared to pregnant women who have higher education.

Education influences knowledge to acquire knowledge, so that with higher education it will be easy to capture new knowledge, especially in receiving information about the importance of the price of Tetanus Toxoid for prospective brides (Aldriana, 2022).

Parity Factors Affecting the Low Coverage of Tetanus Toxoid Immunization in Pregnant Women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

Based on the results of research conducted by researchers, the results obtained on the parity factor were seen from the characteristics that the majority of pregnant women were with multipara parity (>2 children) of 88 people (80.7%) followed by primapara parity (< 2 children) of 21 people (19.3%). The results of data processing with the chi-square test showed that the majority of pregnant women who did not participate in tetanus toxoid immunization were assessed by parity, namely multipara (>2 children) as many as 59 pregnant women (54.1%) with a significant value of 0.03 <0.05.

Parity is a condition where the number of children born to a woman. Women are said to be of high parity and have children > 2 children and low parity, namely < 2 children (Walyani, 2015). Parity levels have attracted the attention of researchers in relation to maternal and child health. It is said, for example, that there is a tendency for the health of mothers with low parity to be better than those with high parity. There is an association between parity levels and certain diseases (Notoatmojdo, 2012).

Theory Notoamodjo (2012) said knowledge is very closely related to parity because the more often a woman gives birth to a baby and takes care of it, the more personal experience is gained and can lead someone to conclude. The results of this study are in line with the theory of Winkjosastro (2005) primigravida pregnant women prefer that their pregnancies are always in good condition and healthy because they have no experience with pregnancy, so during pregnancy and towards delivery, they always take care of the pregnancy so that it is safe and comfortable. Pregnant women with fewer children tend to be better at checking their pregnancies, including carrying out Tetanus Toxoid immunization, than pregnant women with more children.

Research results in Alexander et al., (2020) showed that in characteristics of parity 1-≥4, as many as 21 (77.8%) respondents who carried out tetanus toxoid immunization and as many as 4 (36.4%) respondents who had children 2-4 who carried out tetanus toxoid immunization. The results of the chi-square squared statistical test with a value of $p = 0.039$ $\alpha = 0.05$ $p < \alpha$. These results indicate that the parity factor influences pregnant women in carrying out tetanus toxoid immunization. From the results of the analysis, the OR (Odd Ratio) = 0.163 with a lower value = 0.035 and an upper value = 0.752 means that pregnant women who have 2-4 children have a 1-time risk of not carrying out Tetanus Toxoid immunization compared to pregnant women with 1-≥4 children.

Mothers experiencing pregnancy for the first time are something new, so they are motivated to check their pregnancies, including carrying out Tetanus Toxoid immunization to health workers. On the other hand, mothers who have given birth to more than one child think that they are experienced, so they do not have the enthusiasm to check their pregnancies and carry out Tetanus Toxoid immunization (Padila, 2014).

Knowledge Factors Affecting the Low Coverage of Tetanus Toxoid Immunization in Pregnant Women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

Based on the results of research conducted by researchers, the results on the knowledge factor were seen from the characteristics that the majority of pregnant women had poor knowledge (scores 1-28) regarding tetanus toxoid immunization of 52 people (47.7%), followed by sufficient knowledge (scores 29-33) of 35 people (32.1%) and good knowledge (scores 34-45) of 22 people (20.2%). The results of data processing with the chi-square test showed that the majority of pregnant women who did not participate in tetanus toxoid immunization had poor knowledge (scores 1-28) of 42 pregnant women (38.5%) with a significant value of $0.02 < 0.05$.

The research results obtained with less knowledge were assessed from the questionnaire questions answered by respondents. Respondents did not know the purpose of tetanus toxoid immunization, the benefits of tetanus toxoid immunization, who are at risk of getting tetanus toxoid.

The results of this study are by Green and Kreuter's health behaviour theory (Notoatmodjo, 2012), which argues that knowledge is a predisposing factor of health behaviour and health seeking behaviour. The higher the mother's knowledge, the better her health behaviour, including behavior in carrying out tetanus toxoid immunization. Green and Kreuter also place the knowledge predisposing factor as the factor that is most easily modified, in this case, knowledge can be the key to efforts to improve health behaviour by providing health promotion to pregnant women and their partners regarding tetanus toxoid immunization to increase tetanus toxoid knowledge.

Knowledge is also a very influential factor in decision making. Someone with good knowledge about something tends to make more appropriate decisions related to the problem compared to those with low knowledge. This is because knowledge is the basis for the rationality of action (Notoatmodjo, 2012).

Increased knowledge is not obtained in formal education but can also be obtained in non-formal education. One's knowledge of an object also contains two aspects, namely positive and negative aspects. These two aspects will ultimately determine a person's attitude towards a particular object. The more positive aspects of an object that are known, the more positive attitudes towards the object will grow (Notoadmodjo, 2012; Rosyida et al., 2020).

Research result Alexander et al., (2020) that respondents with good knowledge who carried out immunization were 18 respondents (90.0%), and respondents with less knowledge who carried out immunization against Tetanus Toxoid were 7 (38.9%) respondents. The results of the chi-square statistical test with a value of $p = 0.003$ $\alpha = 0.05$ $p < a$. These results indicate that the knowledge factor influences pregnant women in carrying out tetanus toxoid immunization. From the results of the analysis, the OR (Odd Ratio) = 14,143 with a lower value = 2,479 and an upper value = 80,682 means that pregnant women who have low knowledge have a 14 times risk of not carrying out Tetanus Toxoid immunization compared to pregnant women with low knowledge.

Good knowledge makes a person take the right action that is good for their life and those around them, and they can consider the impact that will be obtained after taking certain actions (Andriani, 2023).

Attitude Factors Affecting the Low Coverage of Tetanus Toxoid Immunization in Pregnant Women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

The results of data processing with the chi-square test showed that the majority of pregnant women who did not participate in tetanus toxoid immunization had a good attitude (score 31-40), as many as 27 pregnant women (24.8%) with a significant value of 0.06> 0.05.

Attitude is an expression of a person's feelings that reflects his likes or dislikes of an object (Yani et al., 2020). The results of the analysis of the relationship between attitude and administration of Tetanus Toxoid immunization found that out of 35 respondents who had a positive attitude, 20 people (57.1%) received Tetanus Toxoid immunization and 15 people who did not receive Tetanus Toxoid immunization (42.9%). Then of the 43 respondents with a negative attitude, 14 people (32.6%) had received Tetanus Toxoid immunization, and 29 people (67.4%) did not get Tetanus Toxoid immunization. Based on the chi-square statistical test results with a significance level of $\alpha = 0.05$, a value of $p = 0.03$ was obtained, which means that there is a relationship between attitude and administration of Tetanus Toxoid immunization (Bambi, 2018).

With the attitude of a pregnant woman, it is a thought about the intent and purpose of compliance in carrying out Tetanus Toxoid immunization and attitudes also play an important role for pregnant women to compliance with tetanus toxoid immunization (Turipah et al., 2023; Amperaningsih et al., 2018). Attitude is a readiness or willingness to act and not an implementation of certain motives. The attitude of a pregnant woman, it is thought about the intent and purpose of compliance in carrying out Tetanus Toxoid immunization and attitudes also play an important role in pregnant women to comply with Tetanus Toxoid immunization (Musfirah et al., 2021).

Factors of Family Support Affecting the Low Coverage of Tetanus Toxoid Immunization in Pregnant Women at the Hutabaginda Health Center, Tarutung District, North Tapanuli Regency in 2022

The absence of family support will be risky the greater number of incomplete come to the integrated service os, while mothers who state that there is family support, will more complete to come to posyandu. However, there are still mothers who express support the family but the mother does not come to the posyandu complete, this is due to the absence of the role of integrated service os cadres which gives mothers an understanding of its importance come to the integrated service post in full (Husna et al., 2021).

The results of data processing with the chi-square test showed that the majority of pregnant women who did not participate in tetanus toxoid immunization due to lack of family support (score 33-37) were 27 pregnant women (24.8%) with a significant value of 0.03 <0.05.

Support will be obtained from the closest family, especially the pregnant woman's husband, to support the services provided during pregnancy. Family support, especially the support given by a husband to his wife, creates inner peace and feelings of pleasure in a wife (Septiani et al., 2020). Support will be obtained from the closest family, especially the pregnant woman's husband, so they can support the services provided during pregnancy. Four types of husband support, namely emotional support, instrumental support, information support, and appraisal support, are given to prospective mothers or wives (Sumaryanti et al., 2023).

This study's results align with Rosyida et al., (2020) said husband's support is one reinforcing factor reinforcing factor that can influence a person's behavior. Meanwhile, the husband's support is a real form of concern and responsibility for men. There are four aspects of support from the family (husband): emotional support, information, instrumental and appreciation.

Research results Alexander et al., (2020) that respondents who received husband support to carry out Tetanus Toxoid immunization were 19 (82.6%) respondents, and respondents who did not receive husband support 6 (40.0%) respondents who carried out tetanus toxoid immunization. The results of the chi-square statistical test with a value of $p = 0.018$, $\alpha = 0.05$ $p < \alpha$. These results indicate that the husband's support factor influences pregnant women in carrying out tetanus toxoid immunization. Means that pregnant women who do not have a husband's support have 7 times the risk of not carrying out Tetanus Toxoid immunization compared to pregnant women who get husband's support in carrying out tetanus toxoid immunization.

According to Lede et al., (2021), Family support, especially the support given by a husband to his husband's wife, will create inner peace and feelings of pleasure in a wife. The family is the first environment known by individuals in the socialization process, so the presence of siblings and supporting relatives who are pregnant and the pregnancy is their first experience, family support is needed.

CONCLUSIONS

Pregnant women who did not participate in tetanus toxoid immunization were assessed from the age of 26-35 years (early adulthood) as many as 40 pregnant women (36.7%) with a significant value of 0.03 <0.05. Pregnant women who did not participate in tetanus toxoid immunization were judged by their last education at college and high school as many as 32 pregnant women (29.4%) respectively. With a significant value of 0.07> 0.05. Pregnant women who did not participate in tetanus toxoid immunization were assessed by parity, namely

multipara (> 2 children) as many as 59 pregnant women (54.1%) with a significant value of 0.03 <0.05.

Pregnant women who did not participate in tetanus toxoid immunization had poor knowledge (score 1-28) of 42 pregnant women (38.5%) with a significant value of 0.02 <0.05. Pregnant women who did not participate in tetanus toxoid immunization had a good attitude (score 31-40) as many as 27 pregnant women (24.8%) with a significant value of 0.06> 0.05. Pregnant women who did not participate in tetanus toxoid immunization due to lack of family support (score 33-37) were 27 pregnant women (24.8%) with a significant value of 0.03 <0.05. The knowledge factor is the most dominant factor for pregnant women not immunized against tetanus toxoid, with a significant value of 0.02 <0.05.

It is recommended for health workers to provide education to pregnant women about the benefits of tetanus toxoid immunization and for pregnant women to utilize health facilities to get pregnancy health services by participating in tetanus toxoid immunization.

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